

Commonwealth of Kentucky
Division for Air Quality
PERMIT STATEMENT OF BASIS (REVISION 1)

CONDITIONAL MAJOR DRAFT PERMIT F-00-034 (REVISION 1)

FLEXCEL - DANVILLE

STEWARTS LANE, INDUSTRIAL PARK, DANVILLE, KY 40422

SEPTEMBER 9 , 2002

REVIEWER: ELAHE HOUSHMAND, REVISION 1

PLANT I.D. #21-021-00021

APPLICATION LOG #54892

SOURCE DESCRIPTION:

Flexcel - Danville, LLC, a subsidiary of Kimball International, Inc. manufactures upholstered furniture. Existing equipment at the site includes four paint booths, a natural gas-fired drying oven, and a woodworking operation consisting of many different types of planers, saws, sanders, routers and other miscellaneous types of equipment.

Initial Permit – This source was major for Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAP). However, the source accepted emission limits pertaining to the HAP and VOC, which allowed it to be a Conditional Major Source. The initial VOC and HAP Conditional Major Source permit for the operation of a wood furniture manufacturing facility was issued on May of 2001. It authorized the Construction / Operation of four paint booths (EP #2- #5), a natural gas-fired drying oven (EP#6), and a woodworking operation (EP #1).

Revision1 – In August of 2002, the source proposed to add an additional spray booth (EP #7) to their facility. The spray booth will be used exclusively for the application of spray adhesive to wood chair frames prior to applying foam padding to these frames. This is a minor revision to the existing permit as allowed by 401 KAR 52:030 Section 14 to install new equipment at the site. The source is not requesting additional VOC or HAP emissions above the already permitted levels (i.e. 90 tons of VOC, 9 tons of single HAP, 22.5 tons of combined HAP). With Revision1 implemented, the Conditional Major Source Permit authorizes Construction / Operation of four spray paint booths (EP #2- #5), a spray adhesive booth (EP #7), a natural gas-fired drying oven (EP#6), and a woodworking operation (EP #1). In addition, the source has requested a name change from Jackson Furniture of Danville to Flexcel - Danville (log # 55369).

COMMENTS:

Type of control and efficiency

There is a bag house with 99% control efficiency for the PM emissions from the woodworking operations. The spray paint booths use exhaust filters that control PM emissions with 90% efficiency. There is not any VOC control devices associated with the paint booths. Also a 60% transfer efficiency will be assumed for the spray painting and adhesive operations.

Emission factors and their source

MSDS
Engineering calculations
AP-42

Applicable regulations

401 KAR 52:030, Federally-enforceable permits for non-major sources, since the source is conditional major for VOC and HAP.

401 KAR 59:010, New process operations, applies to the 5 booths because construction on all of them commenced after July 2, 1975.

401 KAR 63:060. List of hazardous air pollutants, petitions process, lesser quantity designations, and source category list. MACT is not required since the source has taken limits to remain a HAP minor source.

EMISSION AND OPERATING CAPS DESCRIPTION:

VOC emissions shall not exceed 90 tons during any consecutive twelve (12) month period. Monthly records to demonstrate compliance with this limitation shall be maintained, and total VOC emissions shall be reported semiannually.

The emissions of any individual Hazardous Air Pollutant (HAP) shall not exceed nine (9) tons during any consecutive twelve (12) month period. The emissions of combined HAP shall not exceed 22.5 tons per year. Monthly records, which demonstrate compliance with this limitation, shall be maintained and total HAP emissions shall be reported semiannually.

The booths will also be limited by 401 KAR 59:010, New process operations, applicable on or after July 2, 1975. Opacity and mass limits result from application of these regulations. As a result the booths will be required to use filters and be operated and maintained in accordance with manufacturer's recommendations.

PERIODIC MONITORING

Given the control devices used (filters) at the booths, there is little chance of violating a mass or opacity standard. For this reason, direct measurements of mass and opacity emissions will not be required but some assurance that the filters are working properly will be needed. Visual inspection of the filters each day painting is done and proper maintenance are sufficient to assure that the filters are working properly.

Only record keeping is required to demonstrate compliance with the applicable conditional major limitation.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or record keeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has not incorporated these provisions in its air quality regulations.